

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	13-115
Possible Funding Partners:	

PROJECT INFORMATION

Project Title: First Knoll P/J Thinning and Grassland Restoration (Phase IV)

Region and Game Management Unit: Region I / GMU 3B (South of Hwy 60)

Local Habitat Partnership Committee (LHPC):

- Show Low

Was the project presented to the LHPC?

YES[X] NO[]

Has this project been submitted in previous years? YES[] NO[x]

If Yes, was it funded? YES[] NO[] → **HCP Project #:**

Project Type: Pinyon / Juniper Mechanical Thinning

Brief Project Summary: The Lakeside Ranger District has completed NEPA analysis on the Timber Mesa Vernon Wildland Urban Interface (TMV WUI) project. The analysis allows for a total of 41,000 acres of prescribed burning and approximately 37,000 acres of mechanical treatment. The analysis area also includes the 17, 297 acre Woolhouse Wildlife Habitat (Quiet) Area of motorized restricted habitat within the TMV project area available for wildlife. The goal of the project is to continue with long term landscape restoration treatments in transition/winter range grassland habitat across the northern region of Unit 3B. The area is considered very important wintering habitat for deer, antelope, and large numbers of elk. Total area to be treated with funding of this project (Phase IV) is 640 acres which includes PJ thinning and grassland restoration. AGFD and the Lakeside Ranger District have already started identification of treatment areas and Archaeological Clearances in Phase V.

Big Game Wildlife Species to Benefit: Habitat enhancement for elk; other benefits to mule deer, and pronghorn.

Implementation Schedule (Month/Day/Year):

Project Start Date:
March 2014

Project End Date:
December 2014

Environmental Compliance:

NEPA Completed: YES[X] No[] N/A[]

Projected Completion Date: September 2012

State Historic Preservation Office - Archaeological Clearance:

YES[X] No[] N/A[]

Projected Completion Date: See attachment from FS Archaeologist

Arizona Game and Fish Department EA Checklist: N/A[]

To be Completed by: Shawn Wagner

Projected Completion Date: April 2014

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 75,000

Cost Share or Matching Funds: \$ 206,021

Total Project Costs: \$ 281,021

PARTICIPANT INFORMATION

Applicant (please print):

Charlie Denton

Address:

2022 W. White Mtn. Blvd. Pinetop, 85929

E-mail:

cdenton@fs.fed.us

Telephone: (928)368-2128	Date: 3/04/14
AGFD Contact and Phone No. (If applicant is not AGFD personnel): Shawn Wagner Wildlife Manager Unit 3B – 928-367-4281 – swagner@azgfd.gov	
Project has been coordinated with: AZGF, NRCS, Permittee's	

NEED STATEMENT – PROBLEM ANALYSIS:

Past management actions have contributed to a change in forest structure and species composition in the project area. The loss of herbaceous understory vegetation due to the exclusion of fire has caused a significant buildup of understory woody debris, high density of smaller trees with interlocking canopies, and extensive ladder fuels which have created an area that has a high wildland fire potential and degraded wildlife winter range habitat. This has resulted in ecosystems that are not within their natural range of variability and are now at immediate threat from catastrophic disturbances such as wildfire, attack from insects such as bark beetles, disease, and drought. The purpose of this project is to ensure that ecological systems remain healthy and productive, while maintaining biological diversity. There is an ecological need to restore composition and structure (reduce tree density and increase number of large trees) and sustain ecological processes (restoration of natural fire and other disturbance regimes) in these forested vegetation types. Currently, much of the grassland habitat is in need of treatments due to invasion of juniper trees resulting in decreased forage availability, decreased soil productivity, and reduced watershed and range conditions.

PROJECT OBJECTIVES:

The goal of the project is to continue with long term landscape restoration treatments in transition/winter range grassland habitat across the Lakeside Ranger District. Completion of this goal will improve forest ecosystem health, improve wildlife habitat, increase wildland fire protection, and improve watershed conditions. The project area contains year-round habitat for pronghorn as well as elk and mule deer. The project area also serves as critical winter range for mule deer and elk herds found south of Highway 60. Restoring the natural open stand conditions will help restore winter forage conditions. Large portions of this area contain grasslands that have been invaded by relatively new stands of pinyon-juniper vegetation. This encroachment has resulted in a decrease in the historic amount of herbaceous and woody browse plant production. The removal of this new pinyon-juniper growth, will serve to allow for an increase in the production of herbaceous and woody browse plants. The increase in herbaceous cover will also improve watershed conditions by stabilizing erosive soils. Following are specific objectives to be accomplished by the mechanical mastication of P/J vegetation as proposed by this project:

- Restoration of grasslands and improved winter range habitat
- Improved forage quality and quantity within elk, antelope, and mule deer winter range habitat.
- Increase connectivity of isolated pronghorn habitat blocks found in Unit 3B by the creation of open corridors among dense P/J vegetation.
- Improve watershed conditions.
- Modify vegetative class to allow for natural fire cycle to be reintroduced back into the ecosystem.
- Improve watershed conditions.

PROJECT DESCRIPTION AND STRATEGIES:

A block of approximately 640 acres has been identified for this current proposal (Phase IV). This

block contains soil types that are conducive to the production of herbaceous vegetation (grasses and forbs) that will benefit from the removal of the existing P/J canopy. AGFD and the Lakeside Ranger District have already started identification of treatment areas and Archaeological Clearances for Phase V.

Thinning activities will use mechanical mastication to remove most trees within the proposed project area. Pinyon and juniper trees will be removed to restore grassland habitat and improve the quality and quantity of herbaceous and woody browse plant production. In larger treatment areas, some trees will be left in clumps or stringers to facilitate movement/use by elk in the form of hiding and thermal cover. The masticated area will later be prescribed burned to help reintroduce natural fire into the project area if future funding is obtained.

Phase I (In Progress):

Woolhouse PJ and Grassland Restoration – **2, 826 acres**

Cost: \$124,000

Funding Sources: NRCS dollars

Phase II (Awarded Current RMEF PAC Grant) – 800 acres

Second Knoll (grassland restoration) Block – 800 acres

Cost: \$61, 548

Funding Sources: RMEF PAC Funding

Proposed for Treatment in April 2014

Phase III (Proposed for Treatment in April 2014): 1,420 acres

First Knoll Block (NOVO Power) – 1,420 acres

Cost: \$20, 473

Funding Sources: Forest Service

PROJECT LOCATION:

Lakeside Ranger District, Apache Sitgreaves National Forest, Navajo & Apache Countys, Arizona. Townships: T 10N, R 22E; T 10N, R 23E; T 10N, R 24E; various sections (See attached map).

Game Management Unit 3B, south side of State Route 60, approximately 3-8 miles east of Show Low.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

USDA Apache Sitgreaves National Forest, Lakeside Ranger District. There is no private land within the project area.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

YES[] NO[]

HABITAT DESCRIPTION:

Great Basin Grassland, P/J transition woodland. Elevation range: 6400 to 6800 ft.

ITEMIZED USE OF FUNDS:

P/J thinning in historic grassland habitat will be conducted by a private contractor utilizing mechanical mastication, likely a grinder attached to a skid steer. Thinning costs will be reimbursed at a rate of \$85 per acre or less, if bids from contractors come in less than \$85/acre treatment size will increase. P/J thinning in thicker stands will be reimbursed at a rate of approximately \$200 per acre or less. If bids come in lower than these cost per acre estimates more acres than the 640 acre block will be treated.

Special Big Game License Tag Funds

\$75,000 (for mechanical mastication)

Cost Share or Matching Funds

\$124,000 – NRCS funding (mechanical PJ treatment Phase I)

\$61, 548 – RMEF PAC grant funding (for mechanical P/J treatment Phase II)

\$20, 473 – USFS funding (for mechanical P/J treatment Phase III)

\$281, 021 Total Cost Share

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Charlie Denton, Wildlife Staff, Lakeside Ranger District, USDA Forest Service

Sandra Arazi-Coombs, District Archaeologist, Lakeside Ranger District, USDA Forest Service

Chuck Backus and Ethan Ellsworth (Permittees)

PROJECT MONITORING PLAN:

Photo points will be established in selected areas of the overall project area to document pre and post project vegetative conditions.

PROJECT MAINTENANCE:

Resprout may occur on Alligator juniper and may require further treatment.

PROJECT COMPLETION REPORT TO BE FILED BY:

Charlie Denton, USFS

WATER DEVELOPMENT PROJECTS (*see attached worksheet*):

NA

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (*see attached worksheet*):

ARIZONA GAME AND FISH DEPARTMENT
TREE SHEARING WORKSHEET

PROJECT TITLE: First Knoll P/J Thinning and Grassland Restoration (Phase IV)

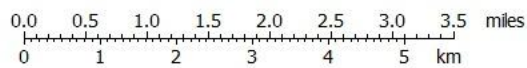
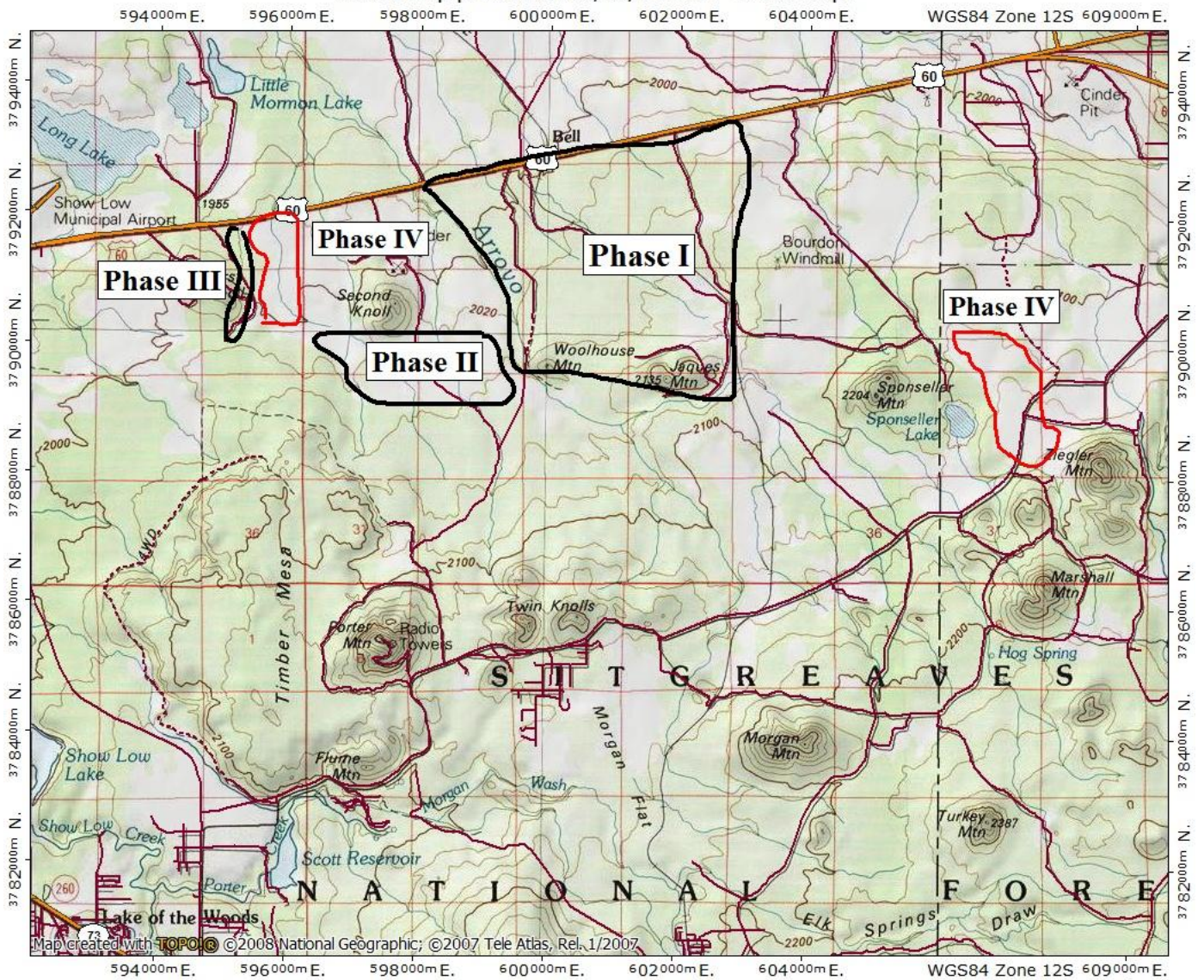
- 1) **What is the estimated acreage of the project?**
2,467 acres
- 2) **How are the trees going to be cleared? (agra axe, chain saw, push):**
Mechanical grinder (likely drum grinder or Fecon grinding head attached to skid steer)
- 3) **What is the estimated number of trees per acre?**
The grassland maintenance areas within the project range from 50 - 150 trees per acre. The areas of woodland treatment has approximately 250 - 300 trees per acre.
- 4) **Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**
Much of the treatment area is grassland maintenance which consists of newly emergent shaggy-bark junipers and alligator junipers with an estimated average diameter at root crown of 5 inches. In the woodland treatment areas, pinyon and shaggy-bark juniper trees are estimated to be 8 inch average diameter. Junipers are multi-stem and pinyons are single stem.
- 5) **Describe terrain (slope, soil type, rocks)**
The terrain is gently rolling slopes with clay and loam soils. Rocky areas will not be treated.
- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.**
None
- 7) **Please provide the following information about access to the proposed site:**
Type of access (mark one): ☒ 2x4 vehicles ☐ 4x4 only ☐ Foot only**
 **If foot access only: Distance in miles: Approx. hiking time:

Does access to this site require crossing private or tribal lands? YES ☐ NO ☒

Is the site relatively accessible for tree shearing equipment? YES ☒ NO ☐

Please describe any restrictions to public access:
None

TOPO! map printed on 03/05/14 from "Untitled.tpo"



TN MN
10°
03/05/14